



Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

Distribution

Mark Wissinger, P.E.
Construction Engineer

May 15, 2002

Subject: Asphalt Cement Content in Grade S Plant Mix

[illegible]

It has come to our attention through review of numerous bids that we have experienced wide variations in the prices bid for asphalt cement (AC) in Grade S mixes. This caused a study of the design and actual asphalt contents versus the basis of plan quantities. That study is summarized in the attached excel spreadsheet. This spreadsheet covers the 55 most recent contracts with Grade S mix, where placement has been completed. This data demonstrates that the average design AC content is 4.96% and the average production AC content is 5.13% versus the basis of plan quantity of 5.5%. The total cost of the AC differential involved for the quantity of mix in this study would be approximately \$2,200,000 assuming a very conservative average AC cost of \$210.00 per metric ton. This would tend to confirm our concerns as to what was happening with the wide variation we were seeing in bids for this material. Bidders would appear to be taking a portion of the quoted material supplier price for AC and placing it somewhere else in the bid. This has the following effects:

When the actual AC content is reduced, the payment to the contractor is reduced at a lesser rate.

When a price reduction is assessed on one of the AC properties, the amount of the reduction is based on the lower bid price.

The basic effect is that we end up paying too much, at an accelerated rate when the differential is placed in the Mobilization item, for the AC. For this reason the Construction Bureau would recommend lowering the basis of plan quantities for AC in Grade S mixes to 5.1%

cc: Preconstruction Bureau
Materials Bureau
Construction Bureau
File

This change is to be made
for appropriate projects begin
with the July 2002 Ready

Carl A. Peil
5/17/02